# LBL PWG Hack-days Highlights & Misc LBL News

Matt & Mayly 2/27/2017

# Hack-days Overview

We had a very successful two days at Fermilab (17-18 Feb). Primary efforts:

- LOAF tutorial, run through, and documentation
  - o Dan Cherdack, Chris Marshall, Laura Fields
- Porting CAFAna from NOvA
  - Chris Backhouse, Erika Catano Mur
- Converting MVA  $v_u$  &  $v_e$  selections and  $E_{true}$  vs  $E_{reco}$  to GLoBES outputs
  - Elizabeth Worcester, Matt Bass
- Getting started with GLoBES
  - o Peter Norris, Cody Milne
- LBL Documentation Wiki: <u>link</u>
  - Mayly Sanchez, Chris Marshall

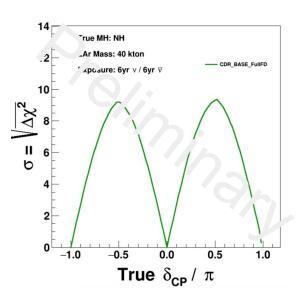
We hope to hear more from each of these efforts in future meetings.

General help and guidance on Sim/Reco: Tingjung, Tom J.

# LOAF

### Dan, Chris M, and Laura

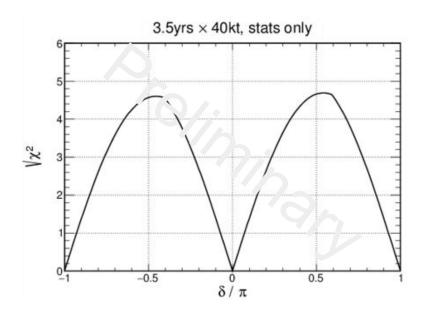
- Dan gave a LOAF tutorial
- Laura was able to produce sensitivity plots →
- Chris M helped populate LOAF wiki
- Lots of discussion concerning next steps for LOAF and efforts needed



# **CAFAna**

### Chris B. & Erika

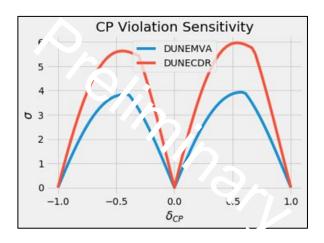
- Porting of NOvA based oscillation analysis tool to DUNE
- Based on full sim/reco MVA outputs, were able to get to preliminary sensitivity calculations
- Pushed to DUNE lblpwg github



## GLoBES/MGT

### Elizabeth & Matt

- Developed scripts to export efficiencies and smearing matrices from MVA selection results to GLoBES format
- Primary results were spectra and CP violation sensitivity comparisons between the MVA (2.1 & 2.2) and CDR.
- Added to lblpwg github
- More on this from Elizabeth later today



### Other News

- LBL FDTF report inputs are in preparation
- In the coming months we will be preparing various toy exercises and data challenges for the various fitting schemes
- Future hack-days
  - Day before collaboration meeting (15 May)? Will send around doodle poll...
- LBL PWG <u>Slack channel</u> is becoming more active. Sign up with your @fnal.gov address.
- Room at FNAL for this meeting: 19th hole (WH14E) (until end of year)